



- Legend**
- | | | |
|--------------------------------------|-----------------------------------|--------------------------|
| Project Component | | |
| Inshore Laguna Madre Pipelines | Onshore Storage Terminal Facility | Existing Pipelines (RRC) |
| Inshore North Padre Island Pipelines | Parks | 90ft Depth Contour |
| Offshore Pipelines | Federal/State Line | Federal Lease Blocks |
| Onshore Pipelines | HDD Pipeline Section | GLO Lease Tracts |
| SPM Buoy System and Safety Zone | Booster Station | |

Coordinate System: NAD 1983 StatePlane
 Texas South FIPS 4205 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US

0 1 2 4 Miles

Exhibit 3: Project Components

Texas Gulf Terminals Project
 Construction, Operation, and
 Decommissioning Procedures
 Deepwater Port License Application
 Texas Gulf Terminals Inc.

| | |
|--------------------|--|
| Kleberg County, TX | |
| 1:168,000 | |
| Date: Jun 19, 2018 | |
| Prepared By: CG/JW | |

1.0 Introduction

1.1 Project Overview

Texas Gulf Terminals Inc. (TGTI; also referred to as Applicant), a Delaware Corporation, is proposing to construct, own, and operate a deepwater port (DWP), associated pipeline infrastructure, booster station, and an onshore storage terminal facility (OSTF), collectively known as the Texas Gulf Terminals Project (Project), for the export of crude oil to support the continued economic growth of the United States of America (U.S.). The Applicant is filing this Deepwater Port License (DWPL) application to obtain a license to construct, own, and operate the Project pursuant to the Deepwater Port Act of 1974, as amended (DWPA), and in accordance with the United States of America (U.S.) Coast Guard (USCG) and the Maritime Administration's (MARAD's) implementing regulations.

The purpose of the proposed Project is to provide a safe, efficient, and cost-effective logistical solution for the export of crude oil to support the continued economic growth of the U.S. The proposed Project would fulfill the need for a safe, efficient, reliable, and cost-effective logistical outlet for abundant supplies of U.S. crude oil from existing and future oil fields. Projections indicate U.S. crude oil production will increase to over 13 million barrels per day (MMbpd) by 2022 and beyond. During 2017, U.S. crude exports were over 1.1 MMbpd, which is expected to increase proportionally as U.S. crude oil production increases during the next several years.

The Applicant is proposing to construct and operate the proposed Project to allow for the loading of Very Large Crude Carriers (VLCC) at the proposed DWP via a single point mooring (SPM) buoy system. VLCC size vessels can weigh up to 320,000 deadweight tonnage (DWT) and require water depths of 71 feet (ft.), or greater when fully loaded. Currently, existing U.S. ports and navigation channels do not have sufficient depths to allow a fully laden VLCC size vessels to transport its cargo safely. As such, ship-to-ship (STS) transfers are required to fully load VLCC size vessels. As the first of its kind in the U.S., the Project is being proposed to serve as a crude oil VLCC export facility capable of directly and fully loading VLCC vessels. The proposed Project infrastructure would be capable of loading VLCCs at rates of approximately 60,000 barrels per hour (bph) and throughput capacities of approximately eight VLCCs per month.

1.2 Project Location

The proposed Project involves the design, engineering, and construction of a DWP, 26.81 miles of pipeline infrastructure, booster station, and an OSTF. For the purposes of this DWPL application, the proposed Project is described in three distinguishable segments by locality including “offshore”, “inshore”, and “onshore”.

Offshore components associated with the proposed Project are defined as those components located seaward of the mean high tide (MHT) line located at the interface of North Padre Island and the Gulf of Mexico (GOM). The Offshore Project components include approximately 14.71 miles of two (2) new 30-inch-diameter crude oil pipelines and a DWP. The proposed offshore pipelines would extend from the MHT line located at the interface of North Padre Island and the GOM to the proposed DWP. The offshore pipelines would intersect portions Texas State submerged lease tracts 817, 818, 927, 928, 929, 933, and Outer Continental Shelf (OCS) Mustang Island Area TX3 Bureau of Ocean Energy Management (BOEM) blocks 816, 822, and 823. The proposed DWP would be installed offshore, within the GOM, outside of U.S. territorial seas, within BOEM block number 823. The proposed DWP is positioned at Latitude N27° 28' 42.60" and Longitude W97° 00' 48.43", approximately 12.7 nautical miles (14.62 statute miles) off the coast of North Padre Island in Kleberg County, Texas.

Inshore components associated with the proposed Project are defined as those components located between the western Laguna Madre MHT line and the MHT line located at the interface of North Padre Island and the GOM. Inshore Project components includes approximately 5.74 miles of two (2) new 30-inch-diameter crude oil pipelines and an onshore valve station located on North Padre Island.

Onshore components associated with the proposed Project are defined as those components landward side of the western Laguna Madre MHT line, located in Kleberg and Nueces Counties, Texas. Onshore Project components includes an approximate 150-acre OSTF, an 8.25-acre booster station, and approximately 6.36 miles of two (2) new 30-inch-diameter crude oil pipelines extending from the OSTF to the booster station and continue to the landward side of the MHT line of the Laguna Madre.

Refer to Figure 1, in Appendix A for a Vicinity Map depicting the location of the proposed Project. Refer to Figure 2 in Appendix A for a Project Component Map detailing the locations of the onshore, inshore, and offshore components associated with the proposed Project.

1.3 Project Components

The operation of the proposed Project as described within this DWPL application requires the installation and operation of offshore, inshore, and onshore Project components to allow for the loading of vessels at the proposed DWP. Refer to Figure 2 in Appendix A for a Project Component Map detailing the locations of the onshore, inshore, and offshore components associated with the proposed Project.

Offshore components associated with the proposed Project includes 14.71 miles of two (2) new paralleling 30-inch diameter offshore pipelines and the DWP. The proposed DWP would utilize a SPM buoy system as the primary device for the loading vessels berthed at the DWP with crude oil. The SPM buoy system would be positioned in water depths of approximately 93 ft. and consists of a pipeline end manifold (PLEM), catenary anchor leg mooring (CALM) system, mooring hawsers, sub-marine hoses, and floating hoses for the transfer of crude oil from the SPM buoy system to vessels berthed at the DWP.

Inshore components associated with the proposed Project includes 5.74 miles of two (2) new 30-inch-diameter pipelines and onshore valve station, for the purposes of connecting onshore Project components to offshore Project components for the operation of the proposed DWP. The inshore portions of the proposed pipeline infrastructure cross the Laguna Madre bay complex, the Gulf Intracoastal Waterway (GIWW), and extend across North Padre Island to the MHT line located at the interface of North Padre Island and the GOM. Additionally, the inshore Project components includes the installation of an onshore valve station on North Padre Island to allow for the isolation of portions of the proposed pipeline infrastructure for routine servicing, maintenance, and inspection operations.

Onshore components associated with the proposed Project include the construction and operation of an OSTF, booster station, and approximately 6.36 miles of two (2) new paralleling 30-inch-diameter pipelines located within Nueces and Kleberg Counties, Texas. The OSTF would occupy approximately 150 acres in Nueces County, Texas and consists of the necessary infrastructure to receive, store, measure, and crude oil to be transported through the proposed pipeline infrastructure to the DWP. Crude oil will be received at the OSTF through one or more incoming crude oil pipeline(s). The number, precise routing, ownership, extent to which destinations other than the OSTF will be served and other details relating to the incoming pipeline(s) are currently unknown. Accordingly, the Applicant currently has no basis upon which to describe the pipeline infrastructure that will feed the OSTF. Once more information is available about this pipeline infrastructure, the Applicant may supplement this application. The proposed booster station would occupy approximately 8.25 acres in Kleberg County, Texas and would consists of the necessary pumping infrastructure to support the transport of crude oil from the OSTF to the DWP. Onshore pipeline infrastructure would consist of approximately 6.36 miles of two (2) new paralleling 30-inch-diameter pipelines extending from the OSTF to the landward side of the MHT line located at the interface of the western shore line of the Laguna Madre.

All of the above described components are discussed within this DWPL application for overall Project clarity. The Applicant is requesting authorization from MARAD under this application for offshore Project components for which it has jurisdiction (i.e. Project components extending seaward of the MHT line located at the interface of North Padre Island and the GOM). Additionally, the Applicant has also prepared and submitted a separate permit application to the U.S. Army Corps of Engineers (USACE) for the